

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the captioned application.

Listing of Claims:

Claim 1 – 22 (Canceled)

Claim 23. (Previously Presented) A shaped charge tubing cutter comprising a pair of substantially matched explosive units respectively formed about an axis of revolution into substantial cones having a normally truncated apex, said cones being joined coaxially at said truncated apex along a common juncture plane, an aperture within said units substantially along said axis and crossing said juncture plane for receipt of a detonation booster, said explosive units being encased within a substantially cylindrical housing having an internal jet window between conical base planes of said explosive units, said jet window comprising at least a pair of circumferential channels about a cylindrical interior wall of said housing, one of said channels having a greater inside diameter than the other and the other of said channels having a greater axial length between substantially radial sidewalls, said one channel being disposed between the sidewalls of said other channel.

Claim 24. (Previously Presented) A shaped charge tubing cutter comprising a pair of substantially matched explosive units respectively formed about an axis of revolution into substantial cones having a normally truncated apex, said cones being joined coaxially at said truncated apex along a common juncture plane, an aperture within said units substantially along said axis and crossing said juncture plane for receipt of a detonation booster, said explosive units being encased within a substantially cylindrical housing said housing being secured to a substantially cylindrical top sub, said top sub having a substantially axial aperture aligned with the axis of revolution of said explosive units for receipt of a detonator, said axial aperture having at least one lateral pressure vent.

Claim 25. (Currently amended) A shaped charge tubing cutter comprising a pair of substantially matched explosive units, each unit being formed about an axis of revolution into a substantially normal cone having a substantially normal base plane and truncated apex, said cones being joined coaxially at said truncated apices along a common juncture plane, an aperture within said joined units extending substantially along said axis and crossing said juncture plane for receipt of a detonation booster, said joined units being encased within a substantially cylindrical housing, said cylindrical housing comprising an axial projection from a closed distal end of said housing having an external perimeter less than an external perimeter of said cylindrical housing, and a structurally integral tool centralizer comprising a planar element secured to said projection by a single fastener proximate of said axis a closed distal end of said housing, said planar element having centralizer comprising a plurality of substantially planar spring blades, the plane of said blades disposed substantially normal to said axis of revolution for flexure about said fastener.

Claim 26. (Currently amended) A shaped charge tubing cutter comprising a pair of substantially matched explosive units, each unit being formed about an axis of revolution into a substantially normal cone having a substantially normal base plane and a truncated apex, said cones being joined coaxially at said truncated apex along a common juncture plane, an aperture within said joined units extending substantially along said axis and crossing said juncture plane for receipt of a detonation booster, said joined units being encased within a substantially cylindrical housing having a substantially conical end closure projecting axially from a distal end of said housing, and a centralizer comprising a resilient, structurally integral, planar element having a plurality of centralizer blades extending radially from said axis of revolution within a plane that is substantially normal to said axis thereto, said planar element blades being secured to said conical end closure by a single fastener proximate of an apex of said conical end closure for permitting housing at a position on said housing that permits said blades to flex about said single fastener without engaging circumferential housing structure.